



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,893	08/30/2001	Shinako Matsuyama	09792909-5132	2067
26263	7590	10/05/2004	EXAMINER	
SONNENSCHN NATH & ROSENTHAL LLP			PAIK, STEVE S	
P.O. BOX 061080			ART UNIT	
WACKER DRIVE STATION, SEARS TOWER			PAPER NUMBER	
CHICAGO, IL 60606-1080			2876	

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/943,893

Applicant(s)

MATSUYAMA ET AL.

Examiner

Steven S. Paik

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-20 and 22-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-20 and 22-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Receipt is acknowledged of the Amendment filed July 12.

Drawings

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance. Page 24 of the Specification discloses that Fig. 1 is a diagram illustrating a conventional person authentication apparatus which reads and verifies a fingerprint.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4-7, 9-15, 17-20, and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dulude et al. (US 6,310,966) in view of Tamada et al. (US 5,017,766).

Art Unit: 2876

Re claims 1, 4-7, 9, 10, 14, 17-20, 22, 23, and 25-28, Dulude et al. disclose a person authentication system (Figs. 3-5, the Registration System 24, Transmitting section 40, and Receiving section 42) for executing personal authentication by comparing a template with sampling information, the template being person authentication data (biometric data 20 in Fig. 2), and the sampling information (col. 5, ll. 52-54) being input (44) by a user (first user) and a method for using the same. The system and method comprise a person authentication authority (Biometric Certificate Generator 32 in Registration Authority 34 of Fig. 2) for issuing an electronic person authentication certificate (biometric certificate 16) including the template (20), a person authentication execution entity (Biometric certificate extractor 64, second classifier 84 in Receiving section 42) for obtaining the certificate including the template from the electronic person authentication certificate (biometric certificate extractor accesses a corresponding biometric certificate 16 stored in the memory 66) issued by said person authentication authority (34) and executing person authentication on the basis of the obtained template (col. 6, ll. 58-65). Furthermore, the electronic person authenticate certificate (16) issued by said electronic person authentication authority (Biometric Certificate Generator 32 in Registration Authority 34 of Fig. 2) stores usage restriction information (validity period; col. 2, ll. 8-9) which includes at least either a certificate expiration date or usage number limit and said electronic person authentication entity (Biometric certificate extractor 64, second classifier 84 in Receiving section 42) checks the validity of the person authentication certificate (16) on the basis of the certificate expiration date (Biometric certificate extractor 64 accesses biometric certificate 16 stored in the memory or database 66. The biometric certificate includes a data filed for validity period.) or the certificate

Art Unit: 2876

usage number limit when the person authentication is executed on the basis of the electronic person authentication certificate (col. 2, ll. 5-17).

Dulude et al. are silent about amended limitations of a person authentication authority receiving a request for updating an issued electronic person authentication certificate from an entity that received the electronic person authentication certificate, making a second electronic person authentication certificate in which an updated certificate expiration date or an updated certificate usage number limit is set according to the request, and then issuing the second electronic person authentication certificate.

Tamada et al. disclose an IC card having an update function of transaction data, account type, supplementary amount, and valid date. The card contains account data including transaction valid date data, transaction limit amount data, PIN, the renewal number of the transaction valid date and transaction limit account. All of the account data may be a template of an electronic person authentication certificate and the said account data are stored in data memory (30). A terminal that processes transactions of the IC card receives input data from a user and compares the input data with account data stored in the data memory to decide the validity of the input data. After a successful verification of the input data, a CPU (27) updates transaction limit amount. The card holder may contact the credit card company to request the transaction amount (usage limit) and the valid date (expiration date) to be updated. Upon successful verification and comparison, the credit card company updates the transaction amount and valid date in accordance with the request of the cardholder (col. 5, ll. 53 - col. 6, ll. 58).

Therefore, it would have been obvious at the time the invention was made to a person having of ordinary skill in the art to incorporate the account data verification and

Art Unit: 2876

update process, as taught by Tamada et al., into the teachings of Dulude et al. for the purpose of updating account data such as transaction valid date data, transaction limit amount data, PIN, the renewal number of the transaction valid date and transaction limit account, in a timely and secure manner according to the needs of a user.

Re claim 2, Dulude et al. in view of Tamada et al. disclose the person authentication system (Figs. 3-5, the Registration System 24, Transmitting section 40, and Receiving section 42) as recited in rejected claim 1 stated above, where said person authentication execution entity (Biometric certificate extractor 64, second classifier 84 in Receiving section 42) checks the validity of the electronic person authentication certificate (16) on the basis of the certificate expiration date or certificate usage number limit (validity period) in person authentication on the basis of the electronic person authentication certificate, and then executes the person authentication by comparing the template (20), stored in the electronic person authentication certificate (16), with sampling information input (46; col. 5, ll. 52-54) by the user (first user) on the condition that the validity of the electronic person authentication certificate has been confirmed on the basis of the certificate expiration date or the certificate usage number limit (validity period). Since the biometric data is from indicia based on the physical characteristics of the individuals including, not limited to, generic composition, facial characteristics, etc. As times goes, the physical characteristics inherently change. Thus, it is necessary to limit a validity of such biometric data for the purpose of providing authentication process with close to a zero error rate.

Re claims 11 and 13, Dulude et al. in view of Tamada et al. disclose the person authentication system (Figs. 3-5, the Registration System 24, Transmitting section 40,

Art Unit: 2876

and Receiving section 42) as recited in rejected claim 1 stated above, wherein said person authentication authority and said person authentication executing entity execute mutual authentication, when data communication is performed therebetween, a data transmitter (48) puts a digital signature (22) on transmitted data, and a data receiver verifies the digital signature (col. 7, ll. 26-44).

Re claim 12, Dulude et al. in view of Tamada et al. disclose the person authentication system (Figs. 3-5, the Registration System 24, Transmitting section 40, and Receiving section 42) as recited in rejected claim 1 stated above, wherein the template (20) is at least one of personal biotic information, personal non-biotic information, and a password, wherein the personal biotic information (first category) is selected from at least one of the group consisting of fingerprint information, retina pattern information, iris pattern information, voice print information (col. 4, ll. 26-32), and handwriting information (col. 2, ll. 54-60), and wherein the personal non-biotic information (second category) is selected from at least one of the first group consisting of seal information, passport information, driver's license information, and card information (col. 2, ll. 61-67 and col. 3, ll. 1-2).

Re claim 15, Dulude et al. in view of Tamada et al. disclose the person authentication method (Figs. 3-5, the Registration System 24, Transmitting section 40, and Receiving section 42) as recited in rejected claim 14 stated above, wherein the electronic person authentication execution entity (Biometric certificate extractor 64, second classifier 84 in Receiving section 42) checks the validity of the electronic person authentication certificate (16) on the basis of the certificate expiration date or certificate usage number limit (validity period) in person authentication on the basis of the

Art Unit: 2876

electronic person authentication certificate, and then executes the person authentication by comparing the template (20), stored in the electronic person authentication certificate (16), with sampling information input (46; col. 5, ll. 52-54) by the user (first user) on the condition that the validity of electronic the person authentication certificate has been confirmed on the basis of the certificate expiration date or the certificate usage number limit (validity period). Since the biometric data is from indicia based on the physical characteristics of the individuals including, not limited to, generic composition, facial characteristics, etc. As times goes, the physical characteristics inherently change. Thus, it is necessary to limit a validity of such biometric data for the purpose of providing authentication process with close to a zero error rate.

Re claim 24, Dulude et al. in view of Tamada et al. disclose the person authentication method (Figs. 3-5, the Registration System 24, Transmitting section 40, and Receiving section 42) as recited in rejected claim 14 stated above, wherein said person authentication authority and said person authentication executing entity execute mutual authentication, when data communication is performed therebetween, a data transmitter (48) puts a digital signature (22) on transmitted data, and a data receiver verifies the digital signature (col. 7, ll. 26-44).

5. Claims 3 and 16, are rejected under 35 U.S.C. 103(a) as being unpatentable over Dulude et al. (US 6,310,966) as modified by Tamada et al. (US 5,017,766) as applied to claim 1 above, and further in view of Epstein (US 6,601,046).

Re claims 3 and 16, Dulude et al. in view of Tamada et al. disclose a person authentication system including all of the claimed features of the invention with the

Art Unit: 2876

exception of storing a usage count in a memory of the person authentication executing device.

Epstein discloses a system having a usage-limit function to protect the authenticity of copy-protected material, watermarking, ticketing, and the like. The system verifies the authenticity of the parameters and provides access to a copy-protected material only within the associated usage-limit of the material (Abstract). The usage-limit prevents the copy-protected material from being regenerated without a proper authentication process. Therefore, unauthorized usage of the copy-protected material is tightly controlled.

Thus, it would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further incorporate the teachings of verifying the expiry of usability of the copy-protected material, as taught by Epstein, in addition to the biometric authentication system of Dulude et al. and modified by Tamada et al. due to the fact that an access to play the copy-protected material is more accurately and selectively given and the number of accessing the copy is limited to a predetermined number for the purpose controlling the number of access given to a particular material. Furthermore, such modification of employing the concept of limiting the usage of a copy-protected material, as taught by Epstein, to the teachings of Dulude et al. in view of Tamada et al. would have been an obvious matter of design variation, well within the ordinary skill in the art, and therefore an obvious expedient.

Response to Arguments

6. Applicant's arguments with respect to claims 1-7, 9-20, and 22-28 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2876

In view of above discussion, claims 1-7, 9-20, and 22-28 are rejected under 35 U.S.C. § 103 (a).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven S. Paik whose telephone number is 571-272-2404.

The examiner can normally be reached on Mon - Fri (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven S. Paik
Examiner
Art Unit 2876

ssp